



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/507,236	02/18/2000	John G. Ellis	081862.P163	9691
7590	11/29/2005		EXAMINER MEHRA, INDER P	
John P. Ward Blakely Sokoloff Taylor & Zafman LLP 12400 Wilshire Boulevard Seventh Floor Los Angeles, CA 90025-1026			ART UNIT 2666	PAPER NUMBER

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/507,236

Applicant(s)

ELLIS, JOHN G.

Examiner

Inder P. Mehra

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 5-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 5-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7. 6) ☐ Other: _____

Response to Amendment

1. This is in response to an amendment dated 11/03/05 which has been fully considered and made of record. Based on this amendment, claims 1, 3, 5-14 are now pending. Claims 2 and 4 have been cancelled. Based on this amendment, claim 3 has been amended.

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, and 5-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Brueckheimer et al** ('261), in view of **Gibbs et al** (US Patent No. 6,683,877), hereinafter, **Gibbs**, further in view of **Caves et al** (US Patent No. 6,665,300), hereinafter, **Caves**.

For claims 1, 5-6 and 11, Brueckheimer ('261) discloses, in reference to fig. 1, a method comprising:

- dynamically (col. 2 line 53-60), establishing ATM adaptation layer 2 (AAL-2) channel identifiers (CIDs), (col. 2 lines 40-60), on a call-by-call basis, (col. 5

Art Unit: 2666

line 67 through col. 6 line 10, refer to abstract, col. 1 line 4-6, col. 1 line 44, col. 2 lines 40-60, col. 3 lines 25-26), using ATM standards-based call control,(col. 1 lines 53-55), signaling protocol (col. 5 line 65-col. 6 line 9);

Brueckheimer ('261) does not disclose expressly the following limitation, which is disclosed by Gibbs, as follows:

- “mapping the common CID to virtual path /virtual channel (VP/VC), refer to col. 6 lines 40-45, col. 7 lines 3-7, that forms part of a virtual user network interface (UNI) to an ATM network, refer to col. 7 , lines 53-55, and col. 7 lines 42-46, .”
- wherein the standards based ATM call control protocol is selected from the list comprising UNI 3.1/4.0 and Q.2931”, **as recited by claim 6**, refer to col. 7 lines 42-46.

Brueckheimer '261 and Gibbs do not disclose expressly the following limitation, which is disclosed by Caves explicitly, as follows:

- mapping the common CID to virtual path /virtual channel (VP/VC), (refer to *“dynamic control concerned with the instantaneous status of the individual AAL2 channels to reflect the cycle of connection set-up (established) and release, is controlled by the outgoing and incoming signaling procedures. Dynamic control maintains the following records: CID values that are allocated (mapping) but currently unassigned to AAL2connections CID values currently assigned to AAL2 connections Pre-assigned CID values that*

are currently activated Pre-assigned CID values that are currently deactivated---", "refer to Caves's col. 4 lines 25-45.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the capability of mapping CID with VPI/VCI forming part of user network interface UNI to an ATM network. The mapping of channel identifier (CID) to VPI/VCI can be implemented by combining the system as taught by Gibbs with Breuckheimer et al ('261) at the user network interface (UNI) to an ATM network. The suggestion/motivation to do so would have been to match the traffic types and quality of service requirements.

For claims 7-10, and 12-14, Breuckheimer et al ('261) discloses the following limitations of the subject matter:

- multiplexing the time division multiplexed communication channel to one or more AAL2 VPs/VCs, ***as recited by claims 9 and 13***, refer to col. 2 lines 42-49.
- mapping the multiple AAL2 VPs/VCs to the CIDs prior to mapping the CIDs to the VP/VC, ***as recited by claims 10 and 14***, refer to col. 2 lines 52-55 and col. 10 lines 19-21.
- Computer readable instructions are embodied in a computer readable medium, ***as recited by claim 12***, refer to col. 13 lines 1-13.

Gibbs discloses the following limitation:

- wherein the mapping is performed at a network edge device(gateway, fig. 1) communicatively coupled to the customer premises equipment, ***as recited by claims 7 and 8*** (end point, fig. 1)", refer to col. 6 lines 40-45.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the capabilities of mapping and multiplexing to be performed at the edge device coupled to the CPE. The mapping and multiplexing of channel identifier (CID) to VPI/VCI can be implemented by combining the system as taught by Gibbs with Breuckheimer et al ('261) at the end point, as taught by Gibbs. The suggestion/motivation to do so would have been to match the traffic types and quality of service requirements.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Brueckheimer et al** ('261), in view of **Caves et al** (US Patent No. 6,665,300), hereinafter, Caves..

For claim 3, Breuckheimer et al ('261) discloses A system comprising:

- means for providing end to end AAL2 switched voice service over a core ATM network, network access gateways to said core ATM network and network edge devices that convert between time division multiplexed TDM voice channels and AAL2 streams the latter used to communicate with the gateways, refer to '261 col. 1 lines 20-27, and col. 2 lines 1-3 ;
- wherein said providing means configures an originating network edge device to set up a call with a destination network edge device using an ATM Forum promulgated signaling protocol that specifies procedures for establishing, maintaining and clearing network connections, refer to '261 col. 1 lines 40-57;

Brueckheimer '261 does not disclose expressly the following limitation, which is disclosed by Caves explicitly, as follows:

Art Unit: 2666

- and wherein the originating network edge device maps a virtual path identifier and virtual circuit identifier of a connection through the core ATM network that connects with the destination network edge device, to a channel identifier (CID) of a designated AAL2 virtual channel connection (VCC) and sends this signaling information formatted in accordance with said ATM Forum promulgated signaling protocol to one of the network access gateways ((refer to *“dynamic control concerned with the instantaneous status of the individual AAL2 channels to reflect the cycle of connection set-up (established) and release, is controlled by the outgoing and incoming signaling procedures. Dynamic control maintains the following records: CID values that are allocated (mapping) but currently unassigned to AAL2 connections CID values currently assigned to AAL2 connections Pre-assigned CID values that are currently activated Pre-assigned CID values that are currently deactivated---”, “refer to Caves’s col. 4 lines 25-45).*

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the capability of mapping CID with VPI/VCI forming part of user network interface UNI to an ATM network. The mapping of channel identifier (CID) to VPI/VCI can be implemented by combining the system as taught by Gibbs with Breuckheimer et al (‘261) at the user network interface (UNI) to an ATM network. The suggestion/motivation to do so would have been to match the traffic types and quality of service requirements.

Response to Arguments

Art Unit: 2666

6. Applicant's arguments filed 11/3/05 regarding claims 1, 3, 5-14 have been fully considered but they are not persuasive.

Applicant argue, "Brueckheimer does not teach or suggest the use of an ATM standards-based call control signaling protocol or AAL2 switched voice networking.

Brueckheimer describe AAL2 but do not refer to any call control signaling to establishing paths through an ATM network.

The next citation is column 5, line 67 through column 6, line 10, which refers to CAS/CCS signaling. However, as can be seen in the enclosed printout of the web page www.pulsewan.com, which gives a novice guide to CAS/CCS, neither of those signaling methods are ATM standards-based or ATM Forum promulgated. Both CAS and CCS are used for T1 time division multiplex systems. There is no teaching or suggestion of replacing CAS/CCS with an ATM standards-based signaling protocol in Brueckheimer.

In response, it is stated that Caves discloses wherein the originating network edge device maps a virtual path identifier and virtual circuit identifier of a connection through the core ATM network that connects with the destination network edge device, to a channel identifier (CID) of a designated AAL2 virtual channel connection (VCC) and sends this signaling information formatted in accordance with said ATM Forum promulgated signaling protocol to one of the network access gateways ((refer to *"dynamic control concerned with the instantaneous status of the individual AAL2 channels to reflect the cycle of connection set-up (established) and release, is controlled by the outgoing and incoming signaling procedures. Dynamic control maintains the following records: CID values that are allocated (mapping) but currently unassigned to AAL2 connections CID values currently assigned to AAL2 connections Pre-*

Art Unit: 2666

assigned CID values that are currently activated Pre-assigned CID values that are currently deactivated---", "refer to Caves's col. 4 lines 25-45).

In light of above explanation, arguments by the applicant are not persuasive.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Inder P. Mehra whose telephone number is 571-272-3170. The examiner can normally be reached on Monday through Friday from 8AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Inder Pal Mehra 11/25/05
Inder P Mehra
Examiner
Art Unit 2666

DM
DANGTON
PATENT EXAMINER